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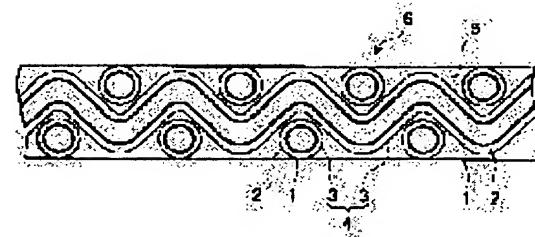
(22)Date of filing : 23.08.2000 (72)Inventor : FUJIWARA HIDEMICHI

## (54) HEAT-TRANSFERRING SHEET

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To provide a heat-transferring sheet that has improved thermal conductivity, appropriately adheres to a semiconductor device and a heat sink, and prevents ground leakage, between the semiconductor device and the heat sink.

**SOLUTION:** In the sheet 6 having improved thermal conductivity, an elastic material 5 is combined with a net (enamel wire net) 4, where an enamel wire 3 whose wire material 1 with improved thermal conductivity is covered with an insulating layer 2, is knitted, and the enamel with net 4 is partially exposed to both front and rear surfaces. Since the front and rear surfaces are made of an elastic material 5 and the enamel wire 3, the heat-transferring sheet appropriately adheres to a semiconductor device and the heat sink. Also, since the enamel wire 3, having the wire material 1 with improved thermal conductivity inside, is distributed and combined in a net, while its one portion is exposed to the front and rear surfaces, the thermal conductivity is superior. Since the wire material 1 with improved thermal conductivity is covered with an insulating layer 2, it will not come into contact with the semiconductor device and heat sink, thus preventing ground leakage from the semiconductor device to the heat sink.



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(54)【発明の名称】 伝熱性シート

(57)【要約】

【課題】 热伝導性に優れ、半導体装置およびヒートシンクと良好に密着し、かつ半導体装置とヒートシンク間で漏電が生じない熱伝導性シートを提供する。

【解決手段】 热良導性線材1を絶縁層2で被覆したエナメル線3を編み合わせた網(エナメル線網)4に弹性材5が複合され、エナメル線網4の一部が裏裏面に露出している伝熱性シート6。

【効果】 裏裏面が弹性材5およびエナメル線3からなるため、半導体装置およびヒートシンクと良好に密着する。内部に熱良導性線材1を有するエナメル線3が、その一部を裏裏面に露出させて網状に分布し複合されているため熱伝導性に優れる。前記熱良導性線材1は絶縁層

